

ABSTRACT

The present invention relates to the medical field, in particular relates to the practice of percutaneous vertebroplasty where a pair of syringes in the distal extreme of a lengthened hydraulic device, are united by a camera of intermediate connection of larger diameter (pressure exerting body) or modified inverted syringe tube with a bolster, a hydraulic connecting tube of flexible material that transmits the pressure of the smaller diameter manual or impulsion syringe in the proximal extreme of the device toward the intermediate cylindrical larger diameter camera (pressure exerting body), this camera is in an inverted position with regard to the first syringe (fluid control), this intermediate camera has a moving piston longitudinal to the axis of the cylinder that is controlled with the first syringe (manual) and in cooperation with the atmospheric pressure. The injecting syringe loaded with bone cement is coupled with the bolster of the body of pressure, and to the needle that drives the cement toward the interior of the bone. The intermediate camera (pressure exerting body) together with the hydraulic tube and the manual syringe form a hydraulic press system ($F/A = f/a$) that allows to increase in a potential way the pressure exerted in the first syringe and to make the injection of polymethylmethacrylate (PMMA) at an approximate distance of 1.0 m to 1.5 m.